UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,630	09/20/2000	Kaushal Kurapati	US000240	5682

24737   7590   01/26/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY   10510

EXAMINER
MA, JOHNNY

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	09/666,630	KURAPATI, KAUSHAL
	Examiner	**Art Unit**	
	Johnny Ma	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2004*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

In regard to applicant's assertion that "[w]ith respect to the claimed recitation of 'comparing' said sets of program recommendation scores, S1 and Sk, to identify a change in said viewer preferences, Bedard does not teach or suggest this feature at all." However, the examiner respectfully disagrees. The Bedard reference discloses the "profiles" are then updated by comparing the viewing units in order to "identify a change in user preferences" as illustrated by comparison step for adding new entries (Bedard 6:35-62) wherein the new entry is identified such that a comparison is inherent to the determination of whether an entry is new or preexisting. Note wherein the "EPG of FIG. 5 can operate in conjunction with the viewer profile of the present invention to organize the individual channels in row 502 by viewer preference" (Bedard 7:39-41) "so as to provide faster access to information concerning the viewer's preferred channels and/or programming categories" (Bedard 7:19-27). Such weighting of programming and comparison for entry of new information identifies a change in user preferences.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bedard (US

5,801,747) in further view of Yoshinobu (US 5,734,444).

        As to claims 1, 3, 16, 18, and 31, note the Bedard reference teaches a system and method

for monitoring viewing history to determine programs to recommend to viewers.

The claimed apparatus, method, and article of manufacture "for identifying changes in television

viewing preferences of an individual" are met by Bedard with reference to Figures 2 and 3 and

corresponding methods described in detail below (see also Bedard 3:32-55). Bedard teaches

computer executable instructions configured in memory to be executed by a processor for

"obtaining a viewer history indicating a set of programs that have been watched by a user" as

seen by the flowchart of Fig. 3 and taught in column 5, lines 6+, by tracking which programs are

watched. A plurality of choices (Figs. 1,2) with respective records combine to form a user

selection history. The overall selection history is established into "at least two portions," by

comparing recent selections to old selections to determine if the profile should be updated using

weighted techniques (Bedard 6:33-63). These selection histories are "profiles" in that they

contain viewer record selections for the corresponding history period. The "profiles" are then

updated by comparing the viewing units in order to "identify a change in user preferences" as

illustrated by comparison step for adding new entries (Bedard 6:35-62) wherein the new entry is

identified such that a comparison is inherent to the determination of whether an entry is new or

preexisting. The claimed generating a corresponding set of program recommendation scores, S1

and Sk, for a set of programs based on said at least two viewing history portions, VH1 and VHk

is met by ranking by relevance based on the amount of time the corresponding channels have

been viewed during the viewer profile collection period (Bedard 6:35-46) wherein the "EPG of

FIG. 5 can operate in conjunction with the viewer profile of the present invention to organize the individual channels in row 502 by viewer preference" (Bedard 7:39-41) "so as to provide faster access to information concerning the viewer's preferred channels and/or programming categories" (Bedard 7:19-27). However, the Bedard reference is silent as to recommending programs in a given time interval. Now note the Yoshinobu reference that discloses a broadcast receiving apparatus that automatically records frequency watched programs. The claimed "programs in a given time interval" is met by the storing of channel history data for a given hour (Yoshinobu 10:30-31) wherein such data could be used (Yoshinobu 12:1-5) for suggesting programming to a user (Yoshinobu 13:13-64). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Bedard user viewing history recommendations with the Yoshinobu time periods for the purpose of providing user recommendations that are more closely tailored to a users typical viewing habits for a given period of time.

As to claims 11, 26 and 32, similar limitations are recited in claims 1, 16, and 31 with the additional limitation of deleting "a portion of said viewing history if said sets of program recommendation scores...are substantially similar." This limitation is met by comparing current and past selection histories and updating the records by maintaining a list of the most relevant past selections. Specifically, old entries may be replaced as taught in col. 5:59-60 or updated if they are similar but have different viewing units as taught in col. 5:44-48.

As to claims 2, 12, 17, and 27, the claimed comparing "the top-N (where N is a positive integer) recommended television programs in each set" is met by comparing the entries as taught in col. 6:35-39.

As to claims 4 and 19, the claimed "presenting a user with a set of recommended programs based on one or both of said sets of programs" is met by using the methods above and displaying a list of recommended programs as seen in Fig. 4 and taught in col. 7:14-28).

As to claims 5 and 20, the claimed "presenting a user with a union set of recommended programs based on said sets of programs" is taught by Bedard through building initial profile. While a profile is being built all entries, old and new will be saved while there is space as taught in col. 5:49-58. By keeping both old and new data, a union is formed.

As to claim 6 and 21, the claimed "presenting a user with an intersections set of recommended programs based said set of programs" is not specifically taught by Bedard. Examiner takes Official Notice that the creation of an intersection of sets of data is notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and methods of Bedard by presenting users with a union of the two history sets in order to provide users with a list of elements that are in both the first and second sets.

As to claims 7 and 22, Bedard teaches giving weight to recently viewed programs (Bedard 6:44-46) and presenting users with a subset of recommendations (Bedard 8:24-30), but not explicitly "displaying recommended programs based on a more recent sub-set of said viewing history." Nevertheless, it would have been obvious for one of ordinary skill in the art to display the recent sub-set created by Bedard in order to provide a user with most recent records which have high relevance.

As to claims 8, 13, 23, and 28, Bedard does not specifically teach "uniformly randomly sampling sub-sets of television programs from said viewing history" to form the viewing history.

Examiner takes Official Notice that uniform random sampling is notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bedard by using uniform random sampling in order to ensure that all elements of the television program set have an equal probability of being selected.

As to claims 9-10, 14-15, 24-25, and 29-30, the claimed selection of the two histories from "a time span that is less than the entire time period covered by the viewing history" is met by selecting from a user selection history over a period of recent viewing as taught in col. 5:34-41. These entries are compared to older entries to determine which should be removed in the case a profile is full (col. 5:19-27). The selected time span is a "similar" time period to a given time period in that they are both time periods with a duration.

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The McClard reference (US 6,438,752 B1) discloses a method and system for selecting television programs based on the past selection history of an identified user.

The Lawler reference (US 5,758,259) discloses an automated selective programming guide.

The Graves et al. reference (US 5,410,344) discloses an apparatus and method of selecting video programs based on viewers' preferences.

The Story reference (US 5,541,638) discloses an user programmable entertainment method and apparatus.

The Herz et al. reference (US 6,088,722) discloses a system and method for scheduling broadcast of and access to video programs and other data using customer profiles. Preferably, the customer profile creating step comprises the step of creating a plurality of customer profiles for each customer, where the plurality of customer profiles are representative of the customer's changing preferences for the predetermined characteristics in accordance with time of the day and of the week. In such an embodiment, the agreement matrix determining step comprises the step of using different customer profiles for each customer in accordance with the time of the day and of the week, thereby reflecting changes in the customer's preferences or "moods" during the course of the week. In addition, the customer profile creating step preferably comprises the step of clustering customer profiles for combinations of customers expected to view the video programs at a particular customer location at particular times on particular days. For example, the clustered profiles for a customer's residence may contain the combined profiles of Mom and Dad in the evening and the combined profiles of the children in the afternoon. In this embodiment, the agreement matrix determining step comprises the step of using the different clustered customer profiles in accordance with the time of the day and of the week. Alternatively, the appropriate customer profiles for use in calculating the agreement matrix may be determined directly from identity information received from the customer or assigned to the customer in accordance to the cluster of customers to which that customer belongs. In the latter technique, it will be appreciated that customer profiles are not strictly necessary since each customer is assigned an initial customer profile determined from the clustered profiles of the other customers in his or her cluster of customers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (703) 305-8099. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jm

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600